

AMENDMENTS TO THE SPECIFICATION

Page 1, please amend the first full paragraph as follows:

The present invention relates to a multi-carrier communication system ~~as defined in the non-characteristic part of claim 1~~, a multi-carrier transmitter for use in such a multi-carrier communication system ~~as defined in the non-characteristic part of claim 5~~, and a multi-carrier receiver for use in such a multi-carrier communication system ~~as defined in the non-characteristic part of claim 6~~.

Page 3, please amend the first full paragraph as follows:

According to the present invention, this object is realised by the multi-carrier communication system ~~defined by claim 1~~, wherein a second pilot carrier whose mean frequency is a fraction of a time division duplexing frame rate and which is orthogonal to other carriers used in the multi-carrier communication system, is transferred from the first transceiver to the said second transceiver to enable the second transceiver to recover the time division duplexing frame rate, the second pilot carrier being different from the first pilot carrier.

The object of the invention is further realized by a, ~~the multi-carrier transmitter defined by claim 5~~ wherein the multi-carrier transmitter further comprises:

e. second pilot carrier generation means (ROT, IFFT, T/S, DAC, PLL), adapted to generate a second pilot carrier whose mean frequency is a fraction of a time division duplexing frame rate and which is orthogonal to other carriers transmitted by the said transmitter, the said second pilot carrier being different from the said first pilot carrier; and

d. second pilot carrier transmission means, coupled to the said second pilot carrier generation means (ROT, IFFT, T/S, DAC, PLL) and adapted to transmit the said second pilot carrier.

Finally, the object of the invention is further realized by a, ~~and the~~ multi-carrier receiver defined by claim 6, wherein CHARACTERISED IN THAT said multi-carrier receiver (VDSL-NT) further comprises :

b. second pilot carrier receiving means (ADC, S/D, FFT, ROT2, ROT1, PLL1, PLL2), adapted to receive a second pilot carrier whose mean frequency is a fraction of a time division duplexing frame rate and which is orthogonal to other carriers received by the said multi-carrier receiver (VDSL-NT), the said second pilot carrier being different from the said first pilot carrier.

Page 4, amend the third full paragraph as follows:

An additional, optional feature of the multi-carrier communication system according to the present invention is that the is defined by claim 2 CHARACTERISED IN THAT said first pilot carrier is constituted by interpolating a plurality of carriers.

Page 5, amend the first full paragraph as follows:

Another additional, optional feature of the multi-carrier communication system according to the present invention is that defined by claim 3 CHARACTERISED IN THAT that the -said first pilot carrier and/or said the second pilot carrier are/is randomised.

Page 5, amend the third full paragraph as follows:

Amendment
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Yet another optional feature of the multi-carrier communication system according to the present invention is ~~defined by claim 4 that CHARACTERISED ItheN THAT~~ said first pilot carrier and/or said second pilot carrier are/is modulated with data.